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Procurement practices have been identified as the bedrock to achieving value for money within both private and public sector organisations. This study investigates the effect of procurement practices on public service delivery, by analysing the perspectives of respondents collected using questionnaires. The response rate of sampled respondents was 96%. From the analysis of demographic characteristics of the respondents, majority has the *following the attributes: (i) tertiary level of education, (ii)* are males, (iii) aged between 30 to 39 years, and (iv) have experience ranging from 1 to 5 years. There is absence of multicollinearity in the variables. The estimates from the multiple regression analysis suggest that procurement policy; procurement planning and sustainable procurement have positive and significant effect on public service delivery at the 5% percent significance level. The researchers therefore conclude that procurement practices have positive and significant influence on public service delivery. A major managerial implication of these findings therefore is that procurement practices is a key driver of service delivery in public institutions.

IEL Classification Numbers: H57; L80

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INTRODUCTION

The import of procurement practices is well established in literature. It is the process of determining the procurement needs and the timing of their acquisition and funding such that the entire operations are met as required in an efficient way. According to Saunders (1997), procurement practices aim at anticipating requirements, sourcing and obtaining supplies, moving supplies into the organization, and monitoring the status of supplies as a current asset. The contribution of procurement practices is perceived in terms of quality, delivery, cost and flexibility, which has an impact on the competitive capability of the firm to meet customer requirements. Mdemu (2013) identified the following as motivation for preparing procurement practices: avoid rush orders which can be cost full, timely delivery of requirements, proper selection of procurement method which is adherence of regulations, procure the right quality of items, right quantity, from the right vendor/supplier at the right time and cost due to proper analysis and specifications. Thus, a mistake in procurement practices may culminate into diverse implications in the organization that may deter its progress.

Service Delivery is conceptualised as the extent to which service has been delivered according to the communities as the beneficiaries of the particular services. It is the set of principles, standards, policies and constraints used to guide the design, development, deployment, operation and



retirement of services delivered (Mabitsela, 2012). In the opinion of Davis (2014), service can be viewed as a system or arrangement that supplies public needs while delivery is the periodical performance of a service. Hussein and Wanyoike (2015) assert that service delivery to people is the deliberate obligatory decision by the elected or appointed officials to serve or deliver goods and services to the recipients. According to Bosire, Moses and Evans (2017), in service delivery, the system of delivery must view tax payers as customers; this therefore calls for placing a high priority on delivery of personalized efficient customer service. Therefore, service delivery is a system or arrangement of periodical performance of supplying public needs. The attitudes exhibited by service providers, employees and managers must be aimed at developing good working relations and ensuring that tax payers/citizens are handled well while being served. However, Jackson and Ombui (2018) posit that regardless of the effort by both the public and private organisations in developing countries and development partners to improve service delivery of the procurement function, procurement is still marred by shoddy works, poor quality goods and services.

A good number of empirical literatures exist on impact of procurement practices on service delivery in both developed and developing countries (see for example, Basheka, 2008; Davis, 2014; Martemyanova, 2018; Jackson & Ombui, 2018). Majority of these studies were conducted for other countries. The studies in Uganda context are scant. There is need for Uganda based studies on the effect procurement practices on service delivery. More so, previous studies have identified a number of procurement practices that influence service delivery. The three major procurement practices are procurement policy, procurement planning, and sustainable procurement practice. There is therefore need to evaluate, empirically, whether these procurement practices actually exact any influence on service delivery in Kabale District, Uganda.

The objective of this paper is to investigate the effect of procurement practices on service delivery in Kabale District in South Western Uganda. Evidence from this study is important to public sector policymakers, procurement practitioners, and to future researchers. By providing evidence-based report on the effect of procurement practices on public service delivery, the study empowers policy-makers to make informed decisions on the best procurement practices that will impact the populace of Kabale District in particular and Uganda in General. The study also provides basis for procurement professionals to decide about issues of service delivery, and thus serve as basis for reforms in procurement practices in local governments. In addition, the findings contribute to existing empirical knowledge on procurement practices in developing countries, and hence reduces lacuna in knowledge. The findings of the study will equally be useful to future researchers in similar study area, and will also serve as reference material for future researchers. The remainder of this paper organised as follows: Section 2 contains review of related literature. Section 3 describes the data and method for analysis. Section 4 presents results and discussions, and section 5 provides conclusions.

REVIEW OF RELATED LITERATURE

Numerous empirical studies have been conducted to evaluate the effect of procurement practices on service delivery in both developed and developing countries. Davis (2014) evaluates procurement practices influencing service delivery in the public sector with focus on the provision of electricity using Kenya power as a case study. The objectives of the study were to establish the influence of procurement policy, procurement planning and sustainable procurement practice on service delivery. The study used stratified sampling technique to select a sample of 100 respondents from a target population of 160 employees, with a response rate of 71%. The study adopted descriptive analysis and concludes that procurement policy, procurement planning and sustainable procurement practice influence service delivery.



A similar study by Willy and Njeru (2014) investigate the effects of procurement planning on procurement performance in Nairobi using the agricultural development corporation as a case study. The study adopted descriptive research design. The analysis conducted using descriptive statistics that integrated both qualitative and quantitative techniques shows a strong relationship exists between procurement planning and procurement performance, therefore the study concludes that the presence of a procurement portfolio, efficient logistics management and adherence to procurement plans positively affects procurement performance in institutions.

Using perception of staff of UNDP Ethiopia, Kebede (2016) assess the practice of procurement planning and its implementation preparation. The study employed descriptive study and purposive sampling method to select a sample of 45 respondents from a total population of 77 staff from all requesting units. The results show that the organization's practice in relation to procurement planning preparation: early needs identification, specification preparation, price estimation, procurement needs consolidation at office level are not applied in the office. The procurement process undertakes based on individual unit's request instead of consolidation at office level. Moreover, the study concurred that there is lack of joint efforts and team works in procurement plan preparation between the requesting and procurement units. In relation to the procurement implementation practice, the findings of the study showed that bid were advertised without plan, short notice and readvertisements undertakes regularly and contract amount variation and modification of the terms of reference & specification occurs.

In related study, Bosire, Moses and Evans (2017)investigate the effect of human resource practices on service delivery in Kakamega County, Kenya. The accessible population comprised 381 respondents drawn from all the county ministries. A correlation survey research design and stratified

random sampling technique was used to select sample respondents. The study established that there is a positive and significant relation between human resource management practices and the service delivery in Kakamega County at 1% significance level (r=0.806, p=0.000)). Results of regression analysis also provide support that human resource practices has significant effect on service delivery in Kakamega County.

In a recent study, Ouma and Ochiri (2017) examine the drivers of implementation of procurement outsourcing practices in state corporations in Kenya using National Hospital Insurance Fund as a case. The study adopted a descriptive survey and a census sampling technique. Results of regression model show evidence of strong positive relationship between the implementation of procurement outsourcing practices and supplier management, contract management, staff competency and regulatory framework with an R value of 0.866.

In a more recent study, Martemyanova (2018) investigate procurement practices influencing service delivery using the TNK-BP Oil & Gas Company in Russia as a case. The study used purposive sampling technique to select a sample of 94 respondents. The results of regression model show that there is positive impact of procurement policies on service delivery. The study further reports positive association between procurement policies and service delivery. Finally, the study established that there is positive association between sustainable procurement and service delivery in TNK-BP.

Similar to Martemyanova (2018), Jackson and Ombui (2018) assess the effect of procurement planning on service delivery in state corporations in Kenya using Kenya Agricultural and Livestock Research Organization as a case. The target population for this study was 90 comprising of the procurement officer, and the finance officers of the Kenya Agricultural and Livestock Research Organization. From the results of regression analysis, the study concluded that procurement



planning had a positive and significant effect on service delivery in state corporations in Kenya. The study also concluded that procurement portfolio and service delivery were positively and significantly related. Further, the study concluded that procurement policies and procedures and service delivery were positively and significantly related. In addition, the study concluded that logistics management and service delivery were positively and significantly related. Finally, the study concluded that procurement budgeting procedures and service delivery were positively and significantly related.

DATA AND METHODS OF ANALYSIS

Data and Sample Size

1This study was conducted using primary data. The primary data were collected using self-administered questionnaires distributed to procurement officers, finance officers, administrative officers, store keepers, education officers, works and technical officers in Kabale District Local Government, Uganda. The questionnaire was selected as an instrument to collect the data because it is straight forward and less time consuming for respondents. The questionnaires were structured and were administered through drop and pick later method.

The target population of the study was 558employees of Kabale District Local Government, Uganda. The sample size was determined using the Slovene's formula thus:

$$n = \frac{N}{1 + N\left(\alpha\right)^2} \tag{1}$$

Where; n=sample size; N=target population; α =0.05 level of significance.

$$n = \frac{588}{1 + 588 (0.05)^2}$$

$$n = \frac{588}{1 + 588 \, (0.0025)}$$

$$n = \frac{588}{1 + 1.47}$$

$$n = \frac{588}{2.47}$$

$$n \cong 238$$

Therefore the minimum sample size chosen in this study was 238 respondents. For convenience of respondents, Purposive sampling technique was adopted to sample employees of Kabale District Local Government, Uganda. This sampling technique is in line with earlier studies that examine procurement planning and services delivery (see for example, Kebede, 2016; Martemyanova, 2018).

Table 1 Population, sample size and sampling techniques			
Kabale District employees	Population	Sample	Sampling technique
Management & support	15	07	
Statutory bodies	06	03	
Finance & Planning	22	11	
Internal audit	05	03	
Education & Works	28	14	Purposive
Production & Marketing	26	13	
Natural resources & Community based	24	12	
HC II, III & IV	975	51	
Sub-counties	278	124	
TOTAL	588	238	



Validity of Research Instrument

To ensure the validity of the research instruments, expert opinion and content validity index (CVI) were used. The instrument was validated by four experts: Two experts in measurement and evaluation and two content experts. The four experts measured the face validity of the instrument, ensuring that the item/statements addressed the research purposes and questions, as well as the adequacy of the constructs used in the questionnaire. All their criticisms, corrections and suggestions gave rise to the instrument used in this study for data collection.

The content validity index (CVI) was computed to determine the content validity of the instrument. Amin (2005) notes that the overall CVI for the instrument should be calculated by computing the average of the instrument and for the instrument to be accepted as valid the CVI should be 0.70 or above. The CVI was computed in equation 2. The CVI was estimated as follows:

$$CVI = \frac{Number\ of\ questions\ declared\ valid}{Total\ number\ of\ questions} \tag{2}$$

$$CVI = \frac{19}{23}$$

CVI = 0.826

A CVI value of 0.82 is greater than 0.7 minimum CVI required for a valid instrument. Hence the instrument is declared valid.

Reliability of Research Instrument

In order to ensure that the research instrument is reliable and can consistently produce reliable data when administered, the researchers adopted testretest and Cronbach's alpha. The test-retest reliability method measures the extent to which a measure, procedure or instrument yields the same result on repeated trials (Agaba, Emenike & Osunsan, 2018). This was done by administering the research instrument twice on the same set of

respondents at different times. The questionnaire was given to 15employees of Kabale District Local Government, Uganda. Same instrument was readministered to the same respondents after two weeks. Data collected from the two intervals were estimated with correlation coefficients (Pearsonr). Hence a reliability coefficient of 0.81 was obtained. This indicates that the instrument was reliable for the study.

Similar to the test re-test method, Cronbach's alpha is the measure of scale's internal consistency. A Cronbach's alpha coefficient that is greater than 0.7, is commonly acceptable as a rule of thumb for reliable research instrument. Notice from Table 2 that the Cronbach's alpha coefficient is 0.93, and indicates that the instrument is very reliable. The two measures of reliability therefore agree that the instrument for this study is reliable.

Table 2: Results of Reliability Tests for the Survey Scale			
Number	Type of Reliability Test	Value	Remarks
1	Cronbach's Alpha	0.934	Reliable
2	Pearson's correlation	0.817	Reliable

Source: Field Study 2018

$Method\, of\, Data\, Analysis$

To establish the effect of procurement practices on public service delivery in Kabale District Local Government in Uganda, multiple regression analysiswas applied in accordance with Ouma and Ochiri (2017), Martemyanova (2018), and Jackson and Ombui (2018)as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$$
 (3)

Where,

Y = independent variable,

 β_0 = intercept of Y,

 β_1 , β_2 and β_3 = parameters of the dependent variables, and

u = error term.



To estimate the multiple regression models, it was converted as follows:

$$PSD = \beta_0 + \beta_1 PP + \beta_2 PPI + \beta_2 SPP + \mu$$
(4)

Where:

PSD= Public service delivery

 β_0 = Constant or Intercept

 β_1 = Parameter of procurement policy

 β_2 =Parameter of procurement planning

 β_3 =Parameter of sustainable procurement practice

 μ = Error term

PP = procurement policy

PPI = procurement planning

SPP = sustainable procurement practice

The signs of the slope parameters (β_1 and β_3) were used to establish the effect of procurement practices on public service delivery in Kabale District Local Government, Uganda. Positive and significant slope coefficients would suggest that procurement practices have positive effect on public service delivery in Kabale District, Uganda. Negative and significant slope coefficients, on the other hand, would indicate that procurement practices have negative effect on public service delivery in Kabale District, Uganda. The a priori expectation of the slope parameters are as follows: β_1 , β_2 , and $\beta_3 > 0$. The assumption of the error term (μ) is absence of serial correlation. The assumption wastested using Durbin-Watson statistic. The estimated regression model would be adequate if the Durbin-Watson statistic is approximately 2. All the tests were tested at the five percent (5%) significance level.

RESULTS AND DISCUSSIONS

Response Rate and Demographic Characteristics of Respondents

Response rate is usually conducted to ascertain the percentage of the targeted respondents that actually responded to the questionnaire. From the results presented in Table 3, observe that out of the sampled 238 respondents, 219 of them responded and returned the questionnaires. This represents a response rate of 92%. This percentage was considered sufficient to represent the population given their busy schedule.

The study presents the demographic profiles of the respondents in Table 4. Notice from the Table 4 that majority of the respondents were males with 67.2%, and 32.8% of the respondents were females. The gender of respondents shows that the findings of the study do not suffer from gender bias.

Observe also, from Table 4, that majority of the respondents were aged between 36 – 45 years of age (37.8%), followed by those aged between 30 to 39 years (63%). The least of the respondent were those aged 50 years and above (6.75%). These indicate that the respondents were adults.

The study requested the respondents to indicate their level of education. Notice from Table 4 that tertiary education is the level of education with the highest response rate (60.9%). The level of education with the least responses is postgraduate certificate holders with 11.8%. Table 4 indicates that all of the respondents sampled in this study have formal education.

Table 3: Response Rate			
Targeted respondents	Actual respondents	Responses as percentage of targeted respondents	
238	219	92%	

Source: Response rate analysis (2018)



Data was also collected from the respondent on their experience in Kabale District Local Government. From Table 4, see that majority of the respondents have worked with the District between 1 to 5 years (48.7%), distantly followed by those with 6 to 10 years experience (19.3%).

Analysis of Multicollinearity in Procurement Practices

Multicollinearity exists whenever two or more of the predictors in a regression model are moderately or highly correlated. It is a state of very high intercorrelations or inter-associations among the independent variables. It is therefore a type of disturbance in the data, and if present in the data the statistical inferences made about the data may not be reliable. The presence of multicollinearity in study was evaluated using Tolerance levels and the Variance Inflation Factor (VIF). The decision rule for the Tolerance level is to accept absence of multicollinearity if the tolerance level is greater than 0.5. Similarly, there is absence of multicollinearity if the VIF if less than 3. Notice from the Table 4.8 that

Table 4: Demographic characteristics of respondents			
Variables	Category	Frequency	Percent
Gender	Male	160	67.2
	Female	78	32.8
	Total	238	100.0
Age	18-29	40	16.8
	30-39	150	63.0
	40-49	32	13.4
	50 and above	16	6.7
	Total	238	100
Education level	High school	65	27.3
	Tertiary education	145	60.9
	Postgraduate	28	11.8
	Total	238	100
Experience	Less than 1 year	40	16.8
	1-5 years	116	48.7
	6-10 years	46	19.3
	Above 10years	36	15.1
	Total	238	100

Source: Authors' computation

Table 5 Collinearity Statistics			
Construct	Tolerance	VIF	
Procurementpolicy	0.593	2.027	
Procurementplanning	0.525	2.351	
Sustainableprocurement	0.672	1.898	

Source: authors' computation



the Tolerance level is greater than 0.5 in both product innovation and price level variables. These indicate evidence of absence of multicollinearity in the predictor variables. Similarly, coefficients of the VIF are less than 3 for all brand equity variables. Hence, provide support for the absence of multicollinearity shown by the Tolerance level. Consequently, there is no existence of multicollinearity in the predictor variable. They are therefore good for empirical analysis.

Effect of Procurement practices on public service delivery in Kabale District, Uganda

This section presents the results of the multiple regression analysis conducted to estimate the effect of procurement policy, procurement planning and sustainable procurement practice on public service delivery in kabale District Local Government, Uganda. Notice from Table 6 that procurement policy; procurement planning and sustainable procurement have positive and significant effect on public service delivery in Kabale District Local Government, Uganda at the 5% percent significance level. These are evident from the significance of the tstatistic for procurement policy (3.81) procurement planning (4.20), and sustainable procurement practice (9.13) which are greater than the theoretical t-statistic (1.96); and the p-values for procurement policy (0.00), procurement planning (0.00), and sustainable procurement practice (0.00) which are all less than the marginal significance level (0.05). These

results indicate that procurement practices have positive and significant effect on public service delivery. The results concur with the a priori expectations of this study specified the section for methodology and data.

The estimates from the regression model also indicate that theR2 is 0.66. This suggests that 66% of the total variation in public service delivery is influenced by procurement practices. The F-statistics show that the three coefficients of procurement practices (procurement policy, procurement planning and sustainable procurement practice) are not zero, as the p-value (0.00) of f-statistics is less than the critical value (0.05). In addition, the Durbin-Watson coefficient (1.99) suggests that there is absence of first order serial correlation in the residual of the regression of procurement practices on public service delivery.

These results are in tandem with the findings of Ouma and Ochiri (2017), Martemyanova (2018), Jackson and Ombui (2018). Martemyanova (2018), for example, report positive impact of procurement policies and sustainable procurement on service delivery in TNK-BP Oil & Gas Company in Russia. Similarly, Jackson and Ombui (2018) show evidence of a positive and significant effect on service delivery in state corporations in Kenya. Further, the study concludes that procurement policies and procedures and service delivery were positively and

Table 6: Results of the effect of procurement practices on public service delivery				
Variable	В	Std. error	t-stat.	p-value
Constant	0.295	0.166	1.779	0.076
Procurement policy	0.193	0.051	3.810	0.000
Procurement planning	0.250	0.059	4.202	0.000
Sustainable procurememnt	0.475	0.052	9.138	0.000
R=0.816; R ² =0.66; Durbin-Watso	on=1.990; F(3, 234) = 1	155.23 [0.00]		•
Dependent variable: public service	ce delivery			

Source: author's computation (2017)



significantly related. Ouma and Ochiri (2017) also report evidence of strong positive relationship between the implementation of procurement practices and supplier management, contract management, staff competency and regulatory framework. The major managerial implication of these findings therefore is that procurement practices is a key driver of service delivery both in public and private institutions.

CONCLUSIONS

This study investigated the effect of procurement practices on public service delivery in Kabale District Local Government Uganda by analysing responses collected using questionnaires. From analysis of respondents, the percentage of targeted respondents that actually responded to the questionnaire was 92%. From the analysis of demographic characteristics of the respondents, majority has the following the attributes: (i) tertiary level of education, (ii) are males, (iii) aged between 30 to 39 years, and (iv) have experience ranging from 1 to 5 years. The data does not show evidence of multicollinearity. The estimates from the multiple regression analysis suggest that procurement policy; procurement planning and sustainable procurement have positive and significant effect on public service delivery in Kabale District Local Government, Uganda at the 5% percent significance level. We therefore conclude that procurement practices have positive and significant influence on public service delivery. A major policy implication of these findings therefore is that adoption procurement practices is a key driver of service delivery in both public and private institutions. Consequently modern organisations should ensure the existence of integrity and transparency in the procurement process, effective procurement planning as well as ensure that procurement implementation adheres to economical, social and environmental sustainability.

REFERENCES

Agaba, M., Emenike, K.O. & Osunsan O. (2018). Product innovation, Price level and competitive advantage: A perception assessment of beer products. Journal of Management and Entrepreneurship, 6(1), 26-34.

Amin, E.M. (2005). Social science research: Conception, methodology and analysis. Kampala: Makerere University of Printery

Basheka, B. C. (2008). Procurement Planning and Accountability of Local Government Procurement Systems in Developing Countries: Evidence from Uganda. Journal of Public Procurement ,8 (3), 379-406.

Bosire, D. K., Moses, N. & Evans, K. (2017). Human resource practices and service delivery in kakamega county, Kenya. International Journal of Multidisciplinary and Current Research, 5,1169-1173.

Davis, M. J. (2014). Procurement practices influencing service delivery: A case of Kenya power.

European Journal of Logistics Purchasing and Supply Chain Management, 2(3), 79-137.

Hussein, F. H., & Wanyoike, D. (2015). Challenges in service delivery within the procurement function of county governments in Kenya: A case of Nakuru Sub-County, Kenya. International Journal of Research in Business Management, 1-14.

Jackson, J. G. & Ombui, K. (2018). Effects of procurement planning on service delivery in state corporations in kenya: A case of Kenya agricultural and livestock research organization. Strategic journal of Business and Change Management, 5(2), 1326-1359.

Kebede, M. G. (2016). Assessment of procurement planning, practice and itsimplementation: the case of united nations development programme(UNDP), Ethiopia countryoffice. A Thesis Submitted to St. Mary's University, School of Graduate Studies in Partial Fulfilment of the Requirements for the Degree of Master of Business Administration.

Mabitsela, N.A. (2012). The impact of service delivery on the quality of lives of the community of Protea South, Soweto in Johannesburg in Gauteng Province, South Africa. Unpublished Thesis in Development, University of Limpopo

Martemyanova, L. (2018). Procurement practices influencing service delivery: a case of TNK-BP Oil & Gas Company in Russia. Unpublished Thesis in Logistics Engineering, JAMK University of Applied Sciences.

Mdemu, J. A. (2013). Effectiveness of procurement planning on services delivery in public sector: A case study of Tanga City Council. Unpublished Thesis in Procurement and Supply Chain Management, Mzumbe University.

Ouma, J.M. & Ochiri, G. (2017). Drivers of implementation of



procurement outsourcing practices in state corporations in Kenya: A case of national hospital insurance fund. International Journal of Innovative Social Sciences & Humanities Research, 5(4), 1-20.

Saunders M., Lewis, P. & Thornhill, A. (2003). Research Methods for Business Students, Upper Saddle River, NY: Prentice Hall.

Willy, K. & Njeru, A. (2014). Effects of procurement planning on procurement performance: A case study of agricultural development corporation, Nairobi. International Journal of Business and Commerce, 3(12), 58-68.

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